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AMENDMENTS IN THE CLAIMS

Please amend the claims as indicated below. The language being added is underlined (“ ”) and the language being deleted contains strikethrough (“~~—~~”):

a4 1. (currently amended) A communication device adapted for use in an automated monitoring system for providing remote monitoring of electricity consumption, the automated monitoring system comprising a site controller in communication with a plurality of electric meters via a wireless communication network and in communication with a host computer via a wide area network, the communication device comprising:

a data interface configured to receive data related to the electricity consumption of an electric meter;

memory comprising a unique identifier corresponding to the electric meter;

logic configured to receive the data related to the electricity consumption of the electric meter, retrieve the unique identifier corresponding to the electric meter, and generate a transmit message using a predefined communication protocol being implemented by the wireless communication network, the transmit message comprising the unique identifier and the data related to the electricity consumption of the electric meter and configured such that the transmit message may be received by the site controller via the wireless communication network and such that the site controller may identify the electric meter and notify the host computer of the transmit message; ~~and~~

a wireless transceiver configured for communication over the wireless communication network and configured to provide the transmit ~~signal~~ message to the wireless communication network and receive messages from the wireless communication network; ~~and~~

logic configured to receive a transmit message from another communication device
and retransmit the received transmit message.

2. (original) The device of claim 1, wherein the logic is stored in memory and the device further comprises a microcontroller configured to implement the logic.

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3. (currently amended) The device of claim 1, wherein the wireless transmitter is configured to provide the transmit ~~signal~~ message as a radio frequency signal.

4. (currently amended) The device of claim 1, wherein the wireless transmitter is configured to provide the transmit ~~signal~~ message as a low power radio frequency signal.

5. (original) The device of claim 1, wherein the data interface is adapted for use with an electromechanical electric meter which measures the electricity consumption associated with the electric meter via a meter wheel and the received data related to the electricity consumption of the electric meter corresponds to a number of rotations of the meter wheel.

6. (currently amended) The device of claim 1, wherein the predefined communication protocol comprises a data packet comprising:

a receiver address identifying the receiver of the data packet;

a sender address identifying the sender of the data packet; and

a command indicator specifying a predefined command code;

7. (original) The device of claim 6, wherein the data packet further comprises a data payload and a checksum field for performing a redundancy check.

8. (currently amended) The device of claim 7, wherein the data packet further comprises:

a packet length indicator which indicates a total number of bytes in the current data packet;

a total packet indicator which indicates the total number of packets in the current message; and

a current packet indicator which identifies the current packet; and
a message number identifying the current message.

9. (currently amended) A communication device for measuring electricity consumption, the device adapted for use in an automated monitoring system for providing remote monitoring of electricity consumption, the automated monitoring system comprising a site controller in communication with a plurality of electric meters via a wireless communication network and in communication with a host computer via a wide area network, the communication device comprising:

an electric meter configured for measuring the electricity consumption of a load associated with the electric meter;

a data interface configured to receive data related to the electricity consumption of the electric meter;

memory comprising a unique identifier corresponding to the electric meter;

logic configured to receive the data related to the electricity consumption of the electric meter, retrieve the unique identifier corresponding to the electric meter, and generate a transmit message using a predefined communication protocol being implemented by the wireless communication network, the transmit message comprising the unique identifier and the data related to the electricity consumption of the electric meter and configured such that

the transmit message may be received by the site controller via the wireless communication network and such that the site controller may identify the electric meter and notify the host computer of the transmit message; and

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a wireless transceiver configured for communication over the wireless communication network and configured to provide the transmit ~~signal~~ message to the wireless communication network and receive messages from the wireless communication network; and,

logic configured to receive a transmit message from another communication device and retransmit the received transmit message.

10. (currently amended) The communication device of claim 9, wherein the logic is stored in the memory and the device further comprises a microcontroller configured to implement the logic.

11. (currently amended) The communication device of claim 9, wherein the wireless ~~transmitter~~ transceiver is configured to provide the transmit ~~signal~~ message as a radio frequency signal.

12. (currently amended) The communication device of claim 9, wherein the wireless ~~transmitter~~ transceiver is configured to provide the transmit ~~signal~~ message as a low power radio frequency signal.

13. (currently amended) The communication device of claim 9, wherein the electric meter measures the electricity consumption associated with the electric meter via an electromagnetic meter wheel and the received data related to the electricity consumption of the electric meter corresponds to a number of rotations of the meter wheel.

14. (currently amended) The device of claim 9, wherein the predefined communication protocol comprises a data packet comprising:

a receiver address identifying the receiver of the data packet;

a sender address identifying the sender of the data packet; and

a command indicator specifying a predefined command code;

15. (currently amended) The communication device of claim 14, wherein the data packet further comprises a data payload and a checksum field for performing a redundancy check.

16. (currently amended) The communication device of claim 15, wherein the data packet further comprises:

a packet length indicator which indicates a total number of bytes in the current data packet;

a total packet indicator which indicates the total number of packets in the current message; and

a current packet indicator which identifies the current data packet; and
a message number identifying the current message.

17. (currently amended) A communication device adapted for use in an automated monitoring system for providing remote monitoring of electricity consumption, the automated monitoring system comprising a site controller in communication with a plurality of electric meters via a wireless communication network and in communication with a host computer via a wide area network, the communication device comprising:

a means for receiving data related to the electricity consumption of an electric meter;

a means for storing a unique identifier corresponding to the electric meter;

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a means for receiving the data related to the electricity consumption of the electric meter, retrieving the unique identifier corresponding to the electric meter, and generating a transmit message using a predefined communication protocol being implemented by the wireless communication network, the transmit message comprising the unique identifier and the data related to the electricity consumption of the electric meter and configured such that the transmit message may be received by the site controller via the wireless communication network and such that the site controller may identify the electric meter and notify the host computer of the transmit message; ~~and~~

a means for transmitting the transmit ~~signal~~ message to the wireless communication network; and-

a means for receiving a transmit message from another communication device and retransmitting the received transmit message.

18. (currently amended) The communication device of claim 17, further comprising a means for receiving command messages from the wireless communication network.

19. (currently amended) The communication device of claim 17, wherein the means for receiving the data related to the electricity consumption of the electric meter is adapted for use with an electric meter which measures the electricity consumption via an electromagnetic means.

20. (currently amended) The communication device of claim 17, wherein the predefined communication protocol comprises a data packet comprising:

- a means for identifying the receiver of the data packet;
- a means for identifying the sender of the data packet; and
- a command means for specifying a predefined command code;

21. (currently amended) The communication device of claim 20, wherein the data packet further comprises:

- a means for indicating a total number of bytes in the current packet;
- a mean for indicating the total number of packets in the current message; and
- a means for identifying the current packet; and
- a means for identifying the current message.

22. (currently amended) A communication device for measuring the electricity consumption corresponding to a load associated with ~~the~~ an electric meter, the electric meter adapted for use in an automated monitoring system for providing remote monitoring of electricity consumption, the automated monitoring system comprising a site controller in communication with a plurality of electric meters via a wireless communication network and in communication with a host computer via a wide area network, the communication device comprising:

- a means for measuring the electricity consumption of a load;
- a means for receiving data related to the electricity consumption of the electric meter;
- a means for storing a unique identifier corresponding to the means for measuring the electricity consumption of the load;

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a means for receiving the data related to the electricity consumption of the electric meter, retrieving the unique identifier corresponding to the electric meter, and generating a transmit message using a predefined communication protocol being implemented by the wireless communication network, the transmit message comprising the unique identifier and the data related to the electricity consumption of the electric meter and configured such that the transmit message may be received by the site controller via the wireless communication network and such that the site controller may identify the electric meter and notify the host computer of the transmit message; and

a wireless transceiver configured for communication over the wireless communication network and configured to provide the transmit ~~signal~~ message to the wireless communication network and receive messages from the wireless communication network; and

means for receiving a transmit message from another communication device and retransmitting the received transmit message.

23. (currently amended) The communication device of claim 22, wherein the means for measuring the electricity consumption of the load is an electromechanical means.

24. (currently amended) The communication device of claim 22, wherein the predefined communication protocol comprises a data packet comprising:

a means for identifying the receiver of the data packet;

a means for identifying the sender of the data packet; and

a command means for specifying a predefined command code;

25. (currently amended) The communication device of claim 24, wherein the data packet further comprises:

- a means for indicating a total number of bytes in the current data packet;
- a means for indicating the total number of packets in the current message; and
- a means for identifying the current data packet; and
- a means for identifying the current message.

26. (currently amended) A system for providing remote monitoring of electricity consumption, the system comprising:

a plurality of electric meters, ~~each of the plurality of electric meters~~ configured to measure the electricity consumption of a load attached to the electric meter;

a plurality of communication devices having a unique address and defining a wireless communication network, each of the plurality of communication devices associated with one of the plurality of electric meters and configured to receive data related to the electricity consumption of the corresponding electric meter data and generate a transmit message using a predefined communication protocol being implemented by the wireless communication network, the transmit message comprising the corresponding unique identifier and the data related to the electricity consumption of the corresponding electric meter, each of the plurality of communication devices further configured to receive a transmit message from at least one of the other communication devices and retransmit the received transmit message; and

a site controller configured for communication with the wireless communication network and configured to receive the transmit message from one of the plurality of communication devices, identify the electric meter associated with the transmit message, and provide information related to the transmit message to a wide area network for delivery to a host computer.

27. (original) The system of claim 26, wherein the site controller is further configured to provide a command message to one of the plurality of communication devices and, in response, the one of the plurality of communication devices provides the transmit message corresponding to the command message.

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28. (original) The system of claim 26, further comprising the host computer.

29. (original) The system of claim 27, wherein the command message is provided to the site controller by the host computer.

30. (original) The system of claim 27, wherein the host computer is configured to enable a user associated with one of the plurality of electric meters to initiate the command message via the wide area network.

31. (currently amended) The ~~device~~system of claim 26, wherein the predefined communication protocol comprises a data packet comprising:

a receiver address identifying the receiver of the data packet;

a sender address identifying the sender of the data packet; and

a command indicator specifying a predefined command code;

32. (currently amended) The ~~device~~system of claim 31, wherein the data packet further comprises a data payload and a checksum field for performing a redundancy check.

33. (currently amended) The ~~device~~system of claim 32, wherein the data packet further comprises:

a packet length indicator which indicates a total number of bytes in the

current data packet;

a total packet indicator which indicates the total number of packets in the current message; and

a current packet indicator which identifies the current data packet; and

a message number identifying the current message.

34. (currently amended) A system for providing remote monitoring of electricity consumption, the system comprising:

a plurality of means for measuring the electricity consumption of an attached load;

a plurality of communication means having a unique address and defining a wireless communication network, each of the plurality of communication means associated with one of the plurality of means for measuring the electricity consumption comprising a means for receiving data related to the electricity consumption of the corresponding electric meter data and a means for generating a transmit message using a predefined communication protocol being implemented by the wireless communication network, the transmit message comprising the unique identifier and the data related to the electricity consumption of the corresponding electric meter, each of the plurality of communication means further configured to receive a transmit message from at least one of the other communication means and retransmit the received transmit message; and

a means for receiving the transmit message from one of the plurality of communication devices, identifying the electric meter associated with the transmit message,

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and providing information related to the transmit message to a wide area network for delivery to a host computer.
